



CODEN [USA]: IAJPBB

ISSN: 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES<http://doi.org/10.5281/zenodo.3768773>Available online at: <http://www.iajps.com>

Research Article

**ANALYSIS OF FACTORS OF DEPRESSION IN PREGNANT
WOMEN**Hafiza Nighat Khalil¹, Umm e Rubab¹, Iqra Zafar²¹Services Institute of Medical Science²Nishtar Medical University, Multan.**Article Received:** February 2020**Accepted:** March 2020**Published:** April 2020**Abstract:**

Introduction: Depression and anxiety during pregnancy is a major public health problem because of their high prevalence. **Aims and objectives:** The main objective of the study is to analyse the stress and depression during pregnancy. **Material and methods:** This cross-sectional study was conducted in SIMS during January 2019 to July 2019. Data were collected from 100 pregnant female patients. Participants were selected through randomly sampling technique. All the data were collected through a questionnaire. **Results:** The data was collected from 100 female patients. The mean maternal age of study and control groups were 28.4 ± 5.5 and 29.4 ± 5.7 years, respectively. Median gestational age of study participants was 11.1 ± 2.1 weeks and 10.9 ± 2.2 weeks for controls. No statistically significant difference was observed between the study and control groups in terms of maternal and gestational age, gravidity, parity, abortus, occupation, housing, and education levels. **Conclusion:** It is concluded that pregnancy is a time of increased vulnerability for the development of anxiety and mood disorders.

Corresponding author:**Hafiza Nighat Khalil,**

Services Institute of Medical Science

QR code



Please cite this article in press Hafiza Nighat Khalil et al, *Analysis Of Factors Of Depression In Pregnant Women.*, Indo Am. J. P. Sci, 2020; 07(04).

INTRODUCTION:

Depression and anxiety during pregnancy is a major public health problem because of their high prevalence. Some women may experience their first depressive episode during pregnancy, whereas others with a history of depression are at increased risk for its recurrence, continuation, or exacerbation. Recently antenatal anxiety has received increased attention with regards to both its impact on infant outcomes and as a risk factor for postnatal depression. Pregnancy and the postpartum can be times of joy and positive expectations but also of stress and difficulties. Pregnancy and delivery bring many physiological and psychosocial changes, and both mothers and fathers are required to face several new challenges during this period. Consequently, pregnancy and the post-partum are times of increased vulnerability for the onset or relapse of a mental illness. Pregnant women with severe nausea and vomiting may have hyperemesis gravidarum (HG), a separate entity from nausea and vomiting of pregnancy (NVP), which if left untreated may lead to increased maternal and fetal morbidity. HG is infrequent when compared with NVP and occurs in 0.3%–2% of all pregnancies. The severity of complaints might vary from one pregnant woman to another and even between pregnancies of the same woman, which suggest the contribution of genetic, biological, and psychological factors¹.

In addition to the physical condition of pregnancy, NVP and HG also negatively affect the mental health, quality of life, and functional capacity of women. In severe cases, fetal development might also be affected². Although there are still questions regarding the exact cause of both conditions, it does appear to be associated with various metabolic and endocrine factors³. In this context, the most implicated factor is suggested to be the production of the human chorionic gonadotropin hormone. Moreover, there is evidence that links this condition to alternation in a variety of hormones, including estrogen, progesterone, placental prostaglandin E₂, and thyroid-stimulating hormone⁴.

Nausea and vomiting in pregnancy (NVP) has for a long time fascinated the scientific community for two main reasons: its high prevalence, which has

rendered it into one of the symptoms of early pregnancy and its great symptom variability, from early physiological nausea of pregnancy to a more severe condition, which may result even in maternal death at its worst form. NVP affects 50–90% of pregnant women⁵. Symptoms begin early in the first trimester, peak at around nine gestational weeks (GW) and typically cease at GW 20⁴. In 0.3–2.3% of cases it progresses to the more severe condition hyperemesis gravidarum (HG) and in 5–22% of affected women the symptoms persist throughout pregnancy⁶.

Aims and objectives

The main objective of the study is to analyse the stress and depression during pregnancy.

MATERIAL AND METHODS:

This cross sectional study was conducted in SIMS during January 2019 to July 2019. Data were collected from 100 pregnant female patients. Participants were selected through randomly sampling technique. All the data were collected through a questionnaire. A detailed socio-demographic data form was given to all subjects. Pregnancy characteristics, age, medication history, tobacco and alcohol use, and educational and familial status were recorded.

The data was collected and analysed using SPSS version 21.0. Student's t-test was used to compare the data that was normally distributed. Data non-normally distributed were compared using the Mann–Whitney U test.

RESULTS:

The data was collected from 100 female patients. The mean maternal age of study and control groups were 28.4±5.5 and 29.4±5.7 years, respectively. Median gestational age of study participants was 11.1±2.1 weeks and 10.9±2.2 weeks for controls. No statistically significant difference was observed between the study and control groups in terms of maternal and gestational age, gravidity, parity, abortus, occupation, housing, and education levels. Only nine women in the NVP group reported a history of cigarette smoking before pregnancy, which was statistically insignificant between groups.

Table 01: Socio-demographic characteristics of study participants

		NVP patients	Controls	p
Age (years)		28.4±5.5	29.4±5.7	NS
Gestational age (weeks)		11.1±2.1	10.9±2.2	NS
BAI		13 (0–43)	4 (0–26)	<0.001
EPDS		7 (0–20)	4 (0–16)	NS
Gravida		2 (1–7)	2 (1–5)	NS
Education				NS
	Illiterate (%)	5 (6.0)	4 (4.8)	
	Primary (%)	22 (26.5)	13 (15.6)	
	High (%)	32 (38.5)	36 (43.3)	
	University (%)	24 (29.0)	30 (36.3)	
Cigarette smoking				NS
	No (%)	74 (89.1)	70 (84.3)	
	Yes (%)	9 (10.9)	13 (15.7)	

If the diagnosis of NVP or HG is made, but there is poor response to initial interventions, an atypical presentation, or initial presentation after 9–10 weeks, other causes must be explored. Table 02 lists other potential causes of nausea and vomiting in pregnancy. If there is fever, a source of infection should be sought or if the history suggests a CNS abnormality, check for signs of raised intracranial pressure.

DISCUSSION:

Prolonged nausea and vomiting in the setting of NVP or HG can lead to maternal vitamin deficiencies. As mentioned above, Wernicke's encephalopathy is a potential serious or fatal maternal complication and is due to severe vitamin B1 (thiamine) deficiency⁸. Approximately 47% of patients with this condition will present with a history of prolonged nausea and vomiting along with the triad of abnormal ocular movements, ataxia, and confusion; an additional percentage will also have diplopia⁹. Symptoms can also be more variable and include memory loss, apathy, decreased level of consciousness, or blurred vision. Although this condition is reversible with prompt treatment, 60% of women will have residual impairment and there is a 37% fetal loss rate¹⁰.

CONCLUSION:

It is concluded that pregnancy is a time of increased vulnerability for the development of anxiety and mood disorders.

REFERENCES:

1. Kramer J, Bowen A, Stewart N, Muhajarine N. Nausea and vomiting of pregnancy: prevalence, severity and relation to psychosocial health. *MCN. The American journal of maternal child nursing.* 2013;38:21–27.
2. Mitchell-Jones N, et al. Psychological morbidity associated with hyperemesis gravidarum: a systematic review and meta-analysis. *BJOG: an international journal of obstetrics and gynaecology.* 2017;124:20–30.
3. Aksoy H, et al. Depression levels in patients with hyperemesis gravidarum: a prospective case-control study. *SpringerPlus.* 2015;4:34.
4. Axfors C, Sylven S, Ramklint M, Skalkidou A. Adult attachment's unique contribution in the prediction of postpartum depressive symptoms, beyond personality traits. *Journal of affective disorders.* 2017;222:177–184.
5. Iliadis SI, et al. Prenatal and Postpartum Evening Salivary Cortisol Levels in Association

- with Peripartum Depressive Symptoms. *PLoS one*. 2015;10:e0135471.
6. Iliadis SI, et al. Associations between a polymorphism in the hydroxysteroid (11-beta) dehydrogenase 1 gene, neuroticism and postpartum depression. *Journal of affective disorders*. 2017;207:141–147.
 7. Cox JL, Holden JM, Sagovsky R. Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. *The British journal of psychiatry: the journal of mental science*. 1987;150:782–786.
 8. Rubertsson C, Borjesson K, Berglund A, Josefsson A, Sydsjo G. The Swedish validation of Edinburgh Postnatal Depression Scale (EPDS) during pregnancy. *Nordic journal of psychiatry*. 2011;65:414–418.
 9. Wickberg B, Hwang CP. The Edinburgh Postnatal Depression Scale: validation on a Swedish community sample. *Acta psychiatrica Scandinavica*. 1996;94:181–184.
 10. Fiaschi L, Nelson-Piercy C, Tata LJ. Hospital admission for hyperemesis gravidarum: a nationwide study of occurrence, reoccurrence and risk factors among 8.2 million pregnancies. *Human reproduction (Oxford, England)* 2016;31:1675–1684.